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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,611	08/07/2003	Yoshihito Asao	Q76555	9608
65565	7590	06/27/2007		
SUGHRUE-265550			EXAMINER	
2100 PENNSYLVANIA AVE. NW			NGUYEN, TRAN N	
WASHINGTON, DC 20037-3213			ART UNIT	PAPER NUMBER
			2834	
			MAIL DATE	DELIVERY MODE
			06/27/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/635,611

Applicant(s)

ASAO ET AL.

Examiner

Tran N. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 May 2007.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 11 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claim 11** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Vohlgemuth (US Pub 2001/0015006)** in view of **Rich (US 4,102,040)**.

**Vohlgemuth** discloses a stator core comprising: a cylindrical iron core (12 in fig 1) including a plurality of slots (18' in figs 1 and 3-6) provided around an inner circumferential face of the cylindrical iron core, and a plurality of notch portions (19' in figs 3-6) are provided in an inner wall surface of only some, but not all, of the slots (figs 3-6); and obviously a coil disposed in the slots (not shown), wherein each of the notch portions comprises a linear slit extending only partially through the cylindrical iron core in a radial direction so that inherently the cylindrical iron core has a lower radial crushing strength at the notch portion than at other portions of the cylindrical iron core.

**Vohlgemuth** substantially discloses the claimed invention, except for the limitations of a plurality of concave portions provided around an outer circumferential face of the cylindrical iron core.

**Rich**, however, teaches a cylindrical stator core (Fig. 17) with a plurality of concave portions (26 in fig 17) provided around an outer circumferential face, and iron stator cores were extremely well known at the time of the invention. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the core of Yamada in view of the concave portions as taught by **Rich**. Doing so would provide the stator core with mechanical means for reducing the weight of a stator core while also permitting effective cooling of the stator by the circulation of air through the concave portions (**Rich**, Col. 11, Lines 30-36).

Both **Vohlgemuth** and **Rich** respectively disclose magnetic stator cores, but did not specifically select iron material for the magnetic core. Nevertheless, iron is well known in the art for high magnetic characteristics (see cited prior art for evidence of iron cores are well known in the art.)

Thus, it would have been obvious to one of ordinary skill in the art to select iron as a suitable magnetic material for forming the magnetic cylindrical core. Doing so would provide a high magnetically qualified stator core and it has been held that one of ordinary skill in the art at the time the invention would choose a suitable and desirable material, because it would be within the general skill of a worker in the art to select a material on the basis of its suitability for the intended use as a matter of obvious design choice (In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960)).

### ***Communication***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tran N. Nguyen whose telephone number is 571-272-2030. The examiner can normally be reached on 7:00 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the

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organization where this application or proceeding is assigned is 571-273-8300. (Note: Use this Central Fax number 571-273-8300 for all official response.)

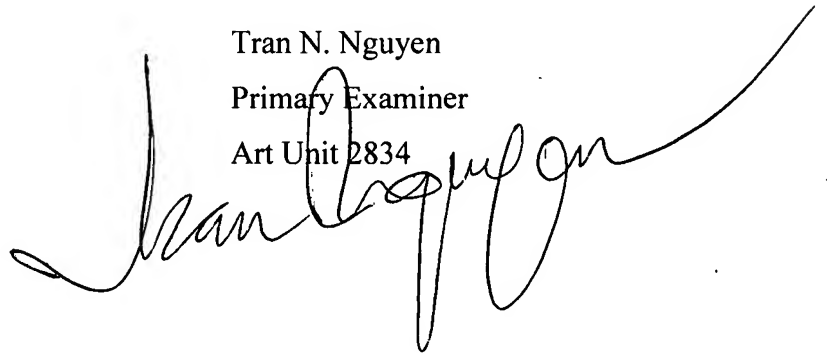
Do **not** use the Examiner's RightFax number without informing the Examiner first because, according to the USPTO policy, any document being sent via RightFax is treated as unofficial response and will not be officially dated until it is routed to the Central Fax.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tran N. Nguyen

Primary Examiner

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A handwritten signature in black ink, appearing to read 'Tran N. Nguyen', is written over the typed name and title. The signature is fluid and cursive, with a long horizontal stroke extending to the right.